

II. REMARKS

A. 35 USC § 102 REJECTIONS

The Examiner rejects claims 34, 36 and 37 under 35 USC § 102(b) as being anticipated by the Yabe et al. article entitled "Compression/Decompression DRAM for Unified Memory Systems: a 16Mb, 20MHz, 90% to 50% Graphics-Bandwidth Reduction Prototype" ("Yabe"). Applicants respectfully traverse the rejection as follows.

Yabe is not prior art.

Applicants respectfully traverse the rejection of claims 34-37 on the basis that Yabe is not prior art to those claims. In particular, Yabe has a publication date of February 5-7, 1998. At least claims 34, 36 and 37 of the present application are supported, however, by disclosure in related applications and patents having a priority date much earlier than 1998. In particular, as reflected in the "Continuation Data" section of the present application, this application is a continuation-in-part of U.S. Application Serial No. 09/239,659, which was filed January 29, 1999. U.S. Patent Application Serial No. 09/239,659 is a continuation-in-part application of U.S. Patent Application Serial No. 08/916,464, now U.S. Patent No. 6,173,381, which was filed August 8, 1997. Applicants have amended the Continuation Data section to reflect the relationship between U.S. Patent Application Serial No. 09/239,659 and U.S. Patent No. 6,173,381.

U.S. Patent No. 6,173,381, Col. 7, Lines 1-20 provides at least on one example of pre-1998 support for the claims in question. Therefore, because the 1998 Yabe article is not prior art to claims 34, 36 and 37, which are supported by pre-1998 disclosures, Yabe does not anticipate those claims.

B. 35 USC § 103 REJECTIONS

The Examiner rejects claims 17-28, 30, 32, 33, 35, 41, 45, 55, 56, 58, and 59 under 35 USC § 103(a) as being unpatentable over Yabe in view of U.S. Patent No. 5,771,011 to Masenas ("Masenas") and U.S. Patent No. 5,389,922 to Seroussi ("Seroussi"). Applicants respectfully traverse the rejections as follows.

Yabe is not prior art.

Applicants respectfully traverse the § 103(a) rejection on the basis that Yabe is not prior art to the claims in question. As indicated above, Yabe has a 1998 publication date. At least claims 17-28, 30, 32, 33, 35, 41, 45, 55, 56, 58, and 59 of the present application are supported, however, by disclosure in related applications and patents having a priority date much earlier than 1998. In particular, see, for example, U.S. Patent No. 6,173,381, Col. 7, Lines 1-20 for such support. Therefore, because the 1998 Yabe article is not prior art to these claims, which are supported by pre-1998 disclosures, Yabe does not render the claims obvious.

Determining match information...based on the current count and the compare results.

The examiner bears the burden of supporting any *prima facie* case of obviousness. M.P.E.P. 2142. A *prima facie* case of obviousness requires that the examiner illustrate how the prior art teaches or suggests all the claim limitations. M.P.E.P. 2143.03. The Examiner failed to meet this burden.

Claim 17 provides:

compressing the uncompressed data comprises: [i] comparing a plurality of symbols from the uncompressed data with each entry in a history table in a parallel fashion, wherein said comparing produces compare results; wherein the history table comprises entries, wherein each entry comprises at least one symbol, and [ii] wherein the method maintains a current count of prior matches which

occurred when previous symbols were compared with entries in the history table; [iii] determining match information for each of said plurality of symbols based on the current count and the compare results; outputting compressed data in response to the match information.

Thus, claim 17 provides that compressed data is output in response to "the current count *and* the compare results."

In contrast, neither Yabe, Masenas nor Seroussi output compressed data in response to "the current count *and* the compare results." As noted by the Examiner, Yabe does not address "a history table and comparing symbols against the contents of the history table in a parallel fashion." (Office Action, Pg. 3). In an attempt to address this shortcoming, the Examiner alleges that:

Masenas discloses a LZ1 plural byte per cycle compression using a history buffer/table implemented with a content addressable memory. The CAM provides plural comparisons to determine potential matches along various possible match trajectories.

No mention, much less a line citation, is made regarding the "current count" element of claim 17. Thus, the Examiner has not met his burden of illustrating how Yabe, Masenas, Seroussi or Yabe in light of Masenas and Seroussi, teaches the claim 17 limitation of data being output in response to "the current count *and* the compare results." In short, the Examiner did not address a material aspect of claim 17.

Therefore, because the examiner failed to satisfy his burden of illustrating how the prior art teaches or suggests all the claim limitations (i.e., how the asserted references teach the output of compressed data in response to "the current count *and* the compare results"), claim 17 is not obvious in light of Yabe, Masenas, Seroussi or Yabe in light of Masenas and/or Seroussi.

Claims 18-28, 30, 32 and 33 are dependent upon claim 17. In addition, claim 35 also provides that compressed data is output in response to "the current count *and* the compare results." Therefore,

for the reasons state above, these claims are also not obvious in light of Yabe, Masenas, Seroussi or Yabe in light of Masenas and/or Seroussi.

There is No Suggestion or Motivation to Modify or Combine the References.

Appellants also respectfully submit that the Examiner has not met the Examiner's burden of factually supporting the alleged motivation to combine Yabe, Masenas and Seroussi. It is the Examiner's burden to factually support any *prima facie* conclusion of obviousness. The Examiner's duty may not be satisfied by engaging in impermissible hindsight; any conclusion of obviousness must be reached on the basis of facts gleaned from the prior art. The preferred evidence to be offered by the Examiner is an express teaching to modify/combine which is set forth within objectively verifiable sources of prior art. *See* MPEP §§ 2141-2144. In this case, the Examiner has not cited to any express teachings within the Yabe, Masenas and Seroussi patents which support a motivation to combine these patents to achieve Appellants' claimed inventions. Thus, claims 17-28, 30, 32, 33, 35, 41, 55, 56, 58 and 59 are not obvious in light of Yabe, Masenas, Seroussi or Yabe in light of Masenas and/or Seroussi.

Yabe may not be combined with Masenas because they address different problems.

As stated above, the examiner bears the burden of supporting any *prima facie* case of obviousness. M.P.E.P. 2142. Again, as stated above, a *prima facie* case of obviousness requires that the examiner show a suggestion or motivation to modify the references—something the Examiner did not show. M.P.E.P. 2143.01. Whether such a motivation exists depends in part on the "nature of the problem." M.P.E.P. 2143.01. As will be shown below, Yabe and Masenas address different problems. Therefore, even if the Examiner would have tried to satisfy his burden of showing a suggestion or motivation to modify the references, he would have failed in his attempt to do so.

Yabe addresses "graphics data [that] is transferred in compressed form from/to the frame buffer." (Yabe, Pg. 1). Masenas addresses "compression of text files" and the "compression of a file string against a dictionary." (Masenas, Abstract and Col. 1:10-11). Compression of graphics data presents different problems than does the compression of text data. For example, different compression/decompression algorithms are appropriate for graphics and text data. (Applicant's Specification, Pg. 67). In addition, decisions regarding different levels of compression should be considered for the two types of data. (Applicant's Specification, Pg. 69). For instance, regarding graphics data, graphics data associated with background images may be more highly compressed than graphics data associated with foreground images. No such considerations are made with respect to simple text data compression. Other factors, such as the noise associated with graphics data but not with text data, further broaden the gulf of dissimilarities that exist between graphics data and text data compression/decompression.

Therefore, the Examiner has failed to prove a *prima facie* case of obviousness because he did not show a suggestion or motivation to combine the references, especially considering that Yabe and Masenas address different problems. Thus, claims 17-28, 30, 32, 33, 35, 41, 55, 56, 58 and 59 are not obvious in light of Yabe, Masenas, Seroussi or Yabe in light of Masenas and/or Seroussi.

III. CONCLUSION

In view of the remarks set forth herein, the application is believed to be in condition for allowance and a notice to that effect is solicited. Nonetheless, should any issues remain that might be subject to resolution through a telephonic interview, Examiner is requested to telephone the undersigned at (512) 370-2869.

Respectfully submitted,



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CERTIFICATION UNDER 37 C.F.R. § 1.8

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to COMMISSIONER FOR PATENTS, P.O. Box 1450, Alexandria, VA 22313-1450, on October 15, 2004.



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